

## High Reflectivity, Broad-Band Silver Coating, Phase II

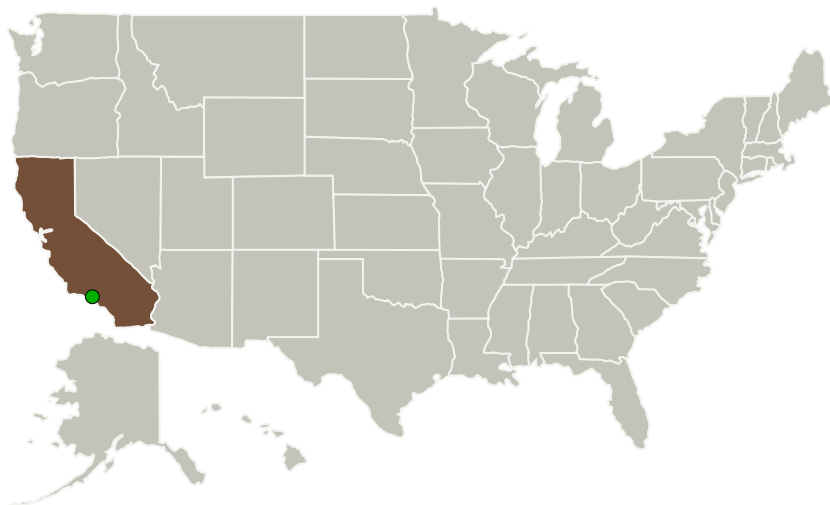
Completed Technology Project (2010 - 2011)




## Project Introduction

Silver coatings for optics greater than 2-meters in diameter are sought by NASA for future space telescope systems. In the Phase I research, Surface Optics Corporation (SOC) investigated several new coating systems for protecting silver. The new coating designs are derivations based on a patented coating design created at Lawrence Livermore National Laboratory (LLNL). The new designs improve the coating's reflectance performance, particularly in the UV region, while maintaining stability in humid and/or corrosive environments. In addition, SOC devised and installed a new piece of coating equipment, which improves the ability to apply exceptionally thin protective layers, by better monitoring the shape of the evaporation plume.

## Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Surface Optics Corporation	Lead Organization	Industry	San Diego, California
 Jet Propulsion Laboratory(JPL)	Supporting Organization	NASA Center	Pasadena, California



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### Primary U.S. Work Locations

California

### Project Transitions



**March 2010:** Project Start



**December 2011:** Closed out

#### Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/139063>)

### Organizational Responsibility

#### Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

#### Lead Organization:

Surface Optics Corporation

#### Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

### Project Management

#### Program Director:

Jason L Kessler

#### Program Manager:

Carlos Torrez

#### Principal Investigator:

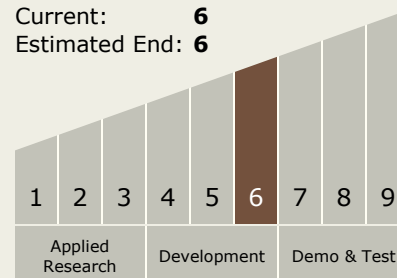
Michael Fulton

### Technology Maturity (TRL)

Start: 6

Current: 6

Estimated End: 6



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### Technology Areas

#### Primary:

- TX08 Sensors and Instruments
  - └ TX08.2 Observatories
    - └ TX08.2.1 Mirror Systems

### Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System